

Translated Readings

The following items are selected from foreign scientific literature, principally Russian, translated by the Central Intelligence Agency, and distributed by the Office of Technical Services, U.S. Department of Commerce, in a series known as *Scientific Information Reports*. Further details may be obtained from the Office of Technical Services by specifying the volume and item given in parentheses in paragraphs below: the first number identifies the volume; the second, the item.

Preservation of Coxiella burnetii

To determine possible time limits for persistence of secondary reservoirs of Q fever, V. F. Ignatovich, Moscow epidemiologist, studied factors affecting survival of *Coxiella burnetii* in cultures on wool, sand, mud, and sawdust under different conditions of temperature and humidity. Some cultures were viable after 6 months (30, 75).

Hungarian Pharmacy

A review of research in the Hungarian Pharmaceutical Institute, by Gyula Horvath, Budapest, has been published in *Magyar kemikusok lapja* (30, 87).

Charges on Bacteria

Using an apparatus of his own design, V. V. Vlodavets, Moscow, following suggestions of Prof. S. S. Mechmenskii, was able to detect and distinguish between electrical charges on micro-organisms in air (29, 102).

Tolerance of HCl

A concentration of no more than 0.05 mg. of HC-1 aerosols per cubic meter of air is recommended by Ye. V. Yelfimova, Moscow, as a result of investigations which found a threshold of tolerance for the olfactory senses at 0.1–0.2 mg.; for optic chronaxy, 0.6 mg.; for vas-

cular reactions, 0.5 mg.; and for respiration, 0.1–0.2 mg. (23, 101).

Biochemical Adaptation

The ability of the human organism to adapt itself to varying environmental, physiological, and pathological conditions is discussed with respect to biochemical processes by Prof. M. Merszhinskiy, Minsk (22, 81).

Radiobiology Review

Work in radiobiology between 1952 and 1955 is reviewed in a book edited by Prof. A. M. Kuzin. The title is "Itogi nauki," published in Moscow in 1957. It is proposed to publish such reviews every 2 or 3 years (18, 114).

Genetic sequelae of exposure of man to ionizing radiations are reviewed by N. I. Shapiro, Moscow (31, 85).

Vibration Sickness

Effects caused by localized high-frequency vibrations are the subject of papers by A. S. Mel'kumova (31, 73) and N. N. Pushkina and L. B. Yushkevich. (31, 74). The latter paper reports a mild leukocytosis and a tendency to hypoglycemia.

Radioactive Environment

Arrangements for protection against radiation on the nuclear-powered icebreaker, *Lenin*, are detailed by A. I. Burnazyan, I. D. Kamyshenko, and Yu. G. Nefedov, (26, 110).

Cancer Research in China

A review of cancer investigations by Chinese scientists has been published by Hu Chinghsian, Peiping (25, 84).

Tetanus Therapy

A new method of treating tetanus victims with a curare-like preparation, diplacine, has been developed by Prof. V. N. Shamov of the

Kirov Military Medical Academy, and applied by K. M. Loban, Moscow, and K. A. Nurishchenko, Leningrad, with success. As described by K. Proshunin, treatment in one case consisted of intravenous administration of 60–70 mg. of diplacine to a woman patient, once or twice a day for 10 days. Artificial respiration was provided when necessary. After dosage, opisthotonus disappeared and pain and spasms subsided (24, 91).

Ear Surgery

The gift of hearing to nine children born deaf is reported to result from surgical installation of an artificial eardrum by Professor Malamush of the Dzherzhinskiy Children's Clinic, Moscow (24, 117).

Carcinogens in Cured Meat?

Certain smoke-curing processes in the meat industry in Leningrad introduced materials which, after ingestion, may facilitate cancer formation, according to A. Novikov, director of the Moscow Oncological Institute, quoted in *Magyar nemzet* of Budapest. On the basis of recommendations by Leningrad investigators, he said, the smoke-curing processes were revised (28, 97).

Air Filtration

FP 5 and number 3 membrane filters for removing micro-organisms from the air were compared by Ye. Yu. Zuykova, Moscow. While both were effective, it was concluded that the FP filter is better for rapid filtration of large volumes of air, as it has less resistance to air currents and is less fragile than the membrane filter (28, 102).

Biological Gloves

Protecting skin against solvents and synthetic tars, workers at the Gor'kiy factory, Krasnoye Sormovo, coat their hands with a paste made of 300 grams of casein gum extra, 10 grams of 25 percent ammonia, 300 grams of glycerine, 850 grams of alcohol, and 850 grams of water. The casein is dissolved in half the water, and ammonia in the remaining water, glycerine, and alcohol are added in that order. The paste forms a film on the hands. It washes off with warm water and soap (28, 104).

Brucellosis Vaccine

Tests of a live vaccine against brucellosis are reported from Kazakhstan and Alma-Ata (27, 70).

Decontamination of Leather

A 1 percent salt solution of chloramine in 30 minutes decontaminates hides infected with *Brucella*, without impairing the leather, reports K. Ye. Yedygenov, Alma-Ata (27, 85).

Effects of Exercise

Exertion's effects on bone and muscle were analyzed in a systematic study carried on for 10 years by M. G. Prives, who holds the chair of normal anatomy in the Leningrad medical institute named for Pavlov. Prolonged exertion produces marked changes, especially in the diaphragm. Phosphorus is deposited in the bones that carry the greater physical load, the substantia compacta thicken, and the bone marrow cavities are reduced. If a person changes to an occupation that requires less exertion, the symptoms of hypertrophy decline. The measurements were conducted with the aid of X-ray and radioactive trace elements (27, 82).

Data on Poisons

Toxicological data on certain organophosphorus compounds in relation to their chemical structure have been published by Yu. S. Kagan (26, 82).

Public Health Progress

A book on public health in the U.S.S.R. and achievements of Soviet medicine is reviewed, apparently by CIA, with an effort to summarize the contents of 124 pages. The authors are Nikolay Ivanovich Graschenkov and Yuriy Pavlovich Lisitsyn. The review says: "It can be gathered from the text that technical changes . . . parallel the development of national economy." The table of contents gives 14 pages to conditions in Czarist times, 25 pages to the October Revolution and its plans for protecting the health of workers, 10 pages to prophylaxis, 14 to an attack on infections, 4 to the prospect of eradicating tuberculosis, 13 to conditioned reflexes, 11 to cardiovascular diseases, 5 to cancer, 3 to blood banks,

4 to new drugs, and 5 to international medical relations. There is no chapter on environmental health services (22, 86).

Soviet authorities have scheduled graduation of 13,700 sanitary physicians, specializing in hygiene and sanitation, for the 5-year period ending 1960. In the previous 5 years, 8,900 were graduated. In the period ending 1965, the number to be graduated will exceed 10,000. It is asserted, "This will satisfy the needs of the Soviet population as far as sanitary epidemic control is concerned." The physicians are trained in 19 sanitary hygiene faculties of medical universities (15, 43).

Public health progress in the Turkmen S.S.R. is the subject of a book by M. G. Berdyklychev, reviewed by P. P. Radkin. He notes that only 20 years ago malaria and trachoma constituted 40 percent of the total incidence of disease in the Republic, whereas these afflictions today are not appreciable. Pappataci fever and typhus have been eradicated (19, 108).

A report on developments in Polish health in the last 15 years has been published by Dr. B. Kozusnik, deputy minister of health, Polish People's Republic (29, 118).

Pasteurella tularensis Strains

Differences in tularemia pathogen strains were analyzed by N. F. Olsuf'yev, O. S. Yemel'yanova, and T. N. Dunayeva, Moscow. The virulent Schu strain, acquired from American investigators in California and Kansas, was compared with virulent strain 503, isolated from *Dermacentor pictus* Herm ticks by N. G. Olsuf'yev in 1949 (28, 92).

Tickborne Encephalitis Virus

Tickborne encephalitis virus was preserved in cow's milk at refrigerator temperatures. In

sour cream and butter, the virus was preserved for 2 months, by M. Gresikova Kohutova, Czechoslovakia (29, 103).

Radiotherapy

A review of medical applications of radio-nuclides in the U.S.S.R. is summarized by Prof. A. Kozlova, Moscow (29, 111).

Antihemorrhagic Drug

Poison from the guersa snake was used to create a drug 10 times as effective in halting bleeding as that derived from the Indian viper, doloya. The drug was developed at the Stalinabad Medical Institute (29, 115).

Carbon 14 in Tobacco Tar

After burning 101 cigarettes, J. R. Chojnowski and A. Dorabialska, in a study conducted in Poland, found that 1 gram of carbon from tobacco tar emitted 154 pulses of radiation a minute. In contrast, carbon from carbon dioxide emitted 95 pulses, and that from carbon monoxide emitted only 62 (20, 71).

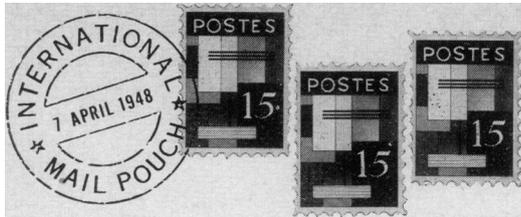
Mental Therapy

Properties of a variety of drugs used in psychotherapy are reviewed by Karl Libering, Yugoslavia (20, 90).

Prospects for development of Soviet psychiatry in the next 7 years are described by V. A. Gilyarovskiy, Moscow (19, 106).

Sonic Aerosols

Use of ultrasonic atomizers in the prophylaxis and therapy of diseases requiring aerosol treatment is discussed by A. P. Livenson, Moscow. The bibliography contains seven titles (19, 82).



Fifteen Cents

Nearly 6 million people in Ceylon are protected against malaria at an annual cost of 15 cents per capita. The 1958 report of the antimalaria campaign lists 114 vigilance and subvigilance units and 38 mobile spray units at work. A total of 624 persons are engaged in eradication activities.

Only 27 persons were reported to have died from the disease in 1958, and positive blood smears from fever cases decreased from 6.4 percent of 105,957 smears in 1957 to 1.6 percent of 63,866 smears in 1958.

During the year U.S. Operations Mission in Ceylon contributed supplies, materials, and equipment including 34 jeeps, 7 carriers, and a station wagon to the antimalaria campaign. Dr. L. F. Gunaratna, who joined the campaign in 1946, superintended eradication activities from May 1955 until his death in September 1958. Dr. T. Visvalingham succeeded him as superintendent.

—TROI E. JOHNSON, M.D., *former chief public health adviser, U.S. Operations Mission, Ceylon.*

Pilot Study in Laos

Last June we started a pilot study to determine the best way to distribute pyrimethamine, a malaria suppressant, to the primitive groups in Laos. Supplies of the drug were given to three voluntary agencies.

The MEDICO clinic at Muong Sing is giving tablets to several hundred persons, including an army detachment nearby. The staff has also sprayed some 70 houses, using the DDT and sprayers supplied by our mission.

The nurse on the International Voluntary Service team at Phon Savanh is giving the tablets to more than 300 people weekly. She reported that headmen from remote villages are coming to ask for the drug.

The eight clinics run by Operation Brotherhood are supplying pyrimethamine to some 6,000 persons for a 6-month period. Also, the physician for

USOM personnel is giving tablets to 150 villagers and a member of the agriculture department asked for a supply for the staff of the USOM pig farm.

Although the pilot study includes less than 10,000, we expect to gain some valuable information on how to sell malaria prophylaxis and can evolve a workable system for distribution on a larger scale in the future.

Before the pilot study started, antimalarial activities in Laos were strictly a Government function with USOM advice and funding. Now other agencies are eager to participate.

—MANLY B. DONALDSON, M.D., *chief, public health division, and* MAYNARD S. JOHNSON, PH.D., *malariologist, U.S. Operations Mission, Laos.*

Resettling Workers

Displaced miners and factory workers from Altiplano mining centers in Bolivia will be settled on farmlands in the tropical highlands of Yungas, 170 kilometers from La Paz. Servicio Cooperativo Interamericano de Salud Pública is cooperating by planning, constructing, equipping, and staffing hospital-health centers in Caranavi, Circuata, and Coroico, which will serve about 25,000 people within 5 years.

—MARCUS P. QUINN, *acting director, Servicio Cooperativo Interamericano de Salud Pública, Bolivia.*

Rehabilitation Teams

The Government of Colombia is sending rehabilitation teams to bolster "all areas of human life" into regions where severe economic and social problems remain as the result of years of political and civil violence.

Following visits to these areas by survey teams and arbiters, the Government made plans to recruit rehabilitation teams. Each will have a physician, nurse, civil engineer, two agricultural extension workers, and a home demonstration agent.

We were asked to help train the teams and are giving them 9 hours of instruction in health education, 1 each in nutrition and industrial health, 2 each in sanitation and public health nursing, and 3 in community organization.

—E. E. MINTY, *acting director, public health division, U.S. Operations Mission, Colombia.*

Federal Publications

A Composite Method for Estimating Postcensal Population of Small Areas by Age, Sex, and Color. *Vital Statistics—Special Reports; Selected Studies; vol. 47, No. 6, pages 161-185; Aug. 24, 1959; by Donald J. Bogue and Beverly Duncan.*

A comparatively simple, inexpensive technique for preparing specific current local-area estimates sufficiently reliable for most planning and policymaking uses and for studies of population trends is outlined.

The rationale of the method, procedures for making estimates, accuracy of estimates, possible refinements, and indirect estimates are discussed.

The text is supported by nine tables and a line graph.

Maternal Disorders Related to Fetal Stress, Perinatal Death, and Congenital Defects. Selected references, 1952-58. *PHS Publication No. 669 (Public Health Bibliography Series No. 25); 1959; compiled by Elizabeth Koenig; 33 pages; 15 cents.*

Four hundred and thirteen references to English language studies have been compiled for medical and public health workers interested in the prevention of reproductive wastage.

Infectious diseases are emphasized. Studies on metabolic, neurological, collagen, and blood disorders, drug effects, and statistical data are included.

Municipal and Industrial Waste Facilities, 1957 Inventory. A cooperative State-Federal report. *PHS Publication No. 622; 1959; vol. 1, 65 cents; vol. 2, \$1.75; vol. 3, \$1; vol. 4, \$1; vol. 5, \$1.75; vol. 6, \$1.25; vol. 7, \$1; vol. 8, 60 cents; vol. 9, \$1.25; the set, \$10.25.*

Data of significance in water pollution control programs and waste treatment facilities are segregated into nine volumes according to De-

partment of Health, Education, and Welfare regions. Material in each volume is arranged by State and alphabetically by community. The volume numbers correspond with the region numbers.

Highlights of Research Progress in Allergy and Infectious Diseases, 1958. *PHS Publication No. 694; 1959; 68 pages; 30 cents.*

Significant research accomplishments in intramural and grant-supported projects of the National Institute of Allergy and Infectious Diseases are described briefly. Subject areas include allergy-immunology, virus diseases, cell biology, and parasitic diseases.

Discussions of staphylococcal and cystic fibrosis research, the Middle America Research Unit in Panama, the respiratory virus study in Antarctica, and various special studies are also presented.

Public Health Service Grants and Awards by the National Institutes of Health, Fiscal Year 1959. Health research facilities construction and research grants. *PHS Publication No. 701, part 1; 1959; 318 pages; \$1.*

Grants for health research facilities and for research projects are listed separately by State and institution. A summary table of research grant support by the individual institutes and the Division of General Medical Sciences shows the distribution of grants by State and grantee institutions. The total number and amount of grants to each institution and each State are included in the directory of individual research investigators.

Film Reference Guide for Medicine and Allied Sciences. *PHS Publication No. 487; 1959; 192 pages; \$1.*

Approximately 2,000 up-to-date films and filmstrips produced and in use by agency members of the Interdepartmental Committee on Medical

Training Aids are listed. Also included are productions of civilian agencies or individuals useful to member agencies.

A brief description under each title includes an abstract of the film's content. An alphabetical list of distributors and instructions for borrowing films are provided.

Dental Care in a Group Purchase Plan. A survey of attitudes and utilization at the St. Louis Labor Health Institute. *PHS Publication No. 684; 1959; 68 pages.*

Dental treatment sought from a group clinic by Teamsters' Union members and their families is analyzed in relation to family size, race, income, educational levels, and attitudes toward dental care. The need for dental health education is emphasized.

Poultry Hygiene. Examination and evaluation of poultry and poultry products. *PHS Publication No. 683, part 1 (FDA Technical Bulletin No. 2); 1959; 55 pages; 40 cents.*

Procedures for antemortem and postmortem inspection of poultry are recommended to officials conducting poultry hygiene programs and as a guide for training lay inspectors and plant personnel.

Included are discussions of 33 diseases and undesirable conditions, significance of specific findings, and disposition of carcasses.

This section carries announcements of new publications prepared by the Public Health Service and of selected publications prepared with Federal support.

Unless otherwise indicated, publications for which prices are quoted are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. Orders should be accompanied by cash, check, or money order and should fully identify the publication. Public Health Service publications which do not carry price quotations, as well as single sample copies of those for which prices are shown, can be obtained without charge from the Public Inquiries Branch, Office of Information, Public Health Service, Washington 25, D.C.

The Public Health Service does not supply publications other than its own.
